Remarks

In the Final December 14, 2006 Office Action, the Examiner rejected Claims 1-21. By this Response, Applicants amend Claims 1, 4-8, 10, 12-15, 17, and 19-21 to clarify Applicants' claimed invention and cancel claims 2, 3, 9, 11, 16, and 18. No new matter is believed introduced by the clarifying amendments.

After entry of this Response, Claims 1, 4-8, 10, 12-15, 17, and 19-21 are pending in the Application. Applicants respectfully assert that Claims 1, 4-8, 10, 12-15, 17, and 19-21 are in condition for allowance and respectfully request reconsideration of the claims in light of the following remarks.

I. Pending Claims

Claim Rejection under 35 U.S.C. § 103(a)

Claims 1, 8, and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Akiba et at. (U.S. Patent No 5,793,694) in view of Applicants admitted prior art. Additionally, claims 2-7, 9-14 and 16-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Akiba et at. (U.S. Patent No 5,793,694) in view of Ma et al. (U.S. Patent No. 6,075,741), and in further view of Applicants admitted prior art. Applicants respectfully traverse these rejections.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. In re Fine, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988).

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, must contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. In re Fine, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); In Re Wilson, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970).

As amended, claim 1 recites, a system, comprising: a first write state machine; a second write state machine; a pulse generator operable to generate a first current draw waveform of

current to the first write state machine and a second current draw waveform of current to the second write state machine, wherein the first current draw waveform is substantially similar to the second current draw waveform and include a large initial pulse of current followed by a plurality of smaller pulses of current; and a delay circuit operable to inject a time delay between the first current draw waveform and the second current draw waveform, and wherein the time delay is less than a duration of the current draw waveform applied to the first write state machine and greater than a duration of the large initial pulse of the first current draw waveform.

Akiba, Ma, and the applicants admitted prior art neither individually nor collectively teach or disclose all of the elements of claim 1. More specifically, Akiba, Ma, and the applicants admitted prior art does not teach or disclose injecting a time delay between the first current draw waveform and the second current draw waveform, and wherein the time delay is less than a duration of the current draw waveform applied to the first write state machine and greater than a duration of the large initial pulse of the first current draw waveform. Rather, Ma and Akiba both teach injecting a delay that is larger than the duration of the entire current draw waveform. Furthermore, the CBR refresh operation mode of Akiba teaches the application of a delayed waveform that is substantially different from the un-delayed waveform. Therefore, the delay injected in Ma and Akiba is substantially larger than the delay injected in the present invention. The systems of Ma and Akiba are a similar to a sequential programming system that is discussed in paragraph five of the present application. Accordingly, neither Ma nor the applicants teach or disclose all of the elements of claim 1.

Claims 8 and 15 disclose a method and a computer-readable medium that include delaying a second current draw waveform of current by a predetermined amount of time from a start of the first current draw waveform, wherein the first current draw waveform is substantially similar to the second current draw waveform and include a large initial pulse of current followed by a plurality of smaller pulses of current; and applying the second pulse of current to a second write state machine, wherein the predetermined amount of time is less than a duration of the first current draw waveform and greater than a duration of the large initial pulse of the first current draw waveform.

Akiba, Ma, and the applicants admitted prior art neither individually nor collectively teach or disclose all of the elements of claims 8 and 15. More specifically, neither Akiba, Ma, or

the applicants admitted prior art teaches or discloses a that the predetermined amount of time is less than a duration of the first current draw waveform and greater than a duration of the large initial pulse of the first current draw waveform. Rather, as explained above, Ma and Akiba disclose systems similar to a sequential programming system as discussed in paragraph five of the present application, in which the predetermined amount of time is at least as long as the duration of the entire first current draw waveform. Accordingly, neither Ma nor the applicants teach or disclose all of the elements of claims 8 and 15.

Applicants, therefore, believe that Claims 1, 8, and 15 are allowable and that their respective dependent claims are also allowable for the further limitations contained therein. Accordingly, Applicants respectfully request withdrawal of all current rejections and issuance a Notice of Allowance in due course of patent office business.

II. Fees

Applicants file this Response within three months of the December 14, 2006 Office Action and with no additional claims. Accordingly, Applicants believe that no extension or claims fees are due. The Commissioner is authorized, however, to charge any fees that may be required, or credit any overpayment, to Deposit Account No. 20-1507.

III. Conclusion

The foregoing is believed to be a complete response to the non-final Office Action mailed December 14, 2006. Applicants respectfully assert that 1, 4-8, 10, 12-15, 17, and 19-21 are in condition for allowance and respectfully request passing of this case in due course of patent office business. If the Examiner believes there are other issues that can be resolved by a telephone interview, or there are any informalities remaining in the application which may be corrected by an Examiner's amendment, a telephone call to Jeff Waters at (404) 885-3082 is respectfully requested.

Respectfully submitted,

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